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Appl. Ser. No.: TBD

IN THE CLAIMS:

Please find below a listing of all of the pending claims. The statuses of the claims are set forth in parentheses.

1. (Currently amended) A cooling system for cooling racks in a data center, said system comprising:

a cooling device for circulating cooling fluid in said data center, said cooling device including a fan;

a plenum having a plurality of returns and an outlet, wherein said outlet of said plenum is in fluid communication with said fan, wherein said plurality of returns are configured for removing said cooling fluid from said data center and are operable to vary a characteristic of said removal of cooling fluid through said <u>plurality of</u> returns<u>; and</u>

<u>at least one return controller operable to control at least one of said plurality of returns, wherein said at least one return controller is operable to substantially independently control said returns on the basis of an anticipated amount of heat predicted to be generated by said racks.</u>

2. (Original) The system according to claim 1, wherein said characteristic of said cooling fluid comprises at least one of volume flow rate, velocity and direction of cooling fluid removal.

3. (Currently amended) The system according to claim 1, ~~further comprising:~~

~~at least one return controller operable to control at least one of said returns,~~ wherein said at least one return controller is configured to substantially independently control said

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plurality of returns to thereby substantially independently vary said characteristic of said

cooling fluid removal through each of said plurality of returns.

4. (Currently amended) The system according to claim [[3]] 1, further comprising:

a plurality of sensors configured to sense an environmental condition within said data

center, said environmental condition including at least one of temperature, humidity,

pressure, and cooling fluid flow rate, wherein said at least one return controller is configured

to substantially independently control said plurality of returns in response to said measured

environmental condition.

5-11. (Canceled).

12. (Currently amended) A method of cooling a plurality of racks in a data center,

said method comprising:

activating a cooling system and opening a plurality of returns, said plurality of returns

being configured to remove cooling fluid from various locations of said data center;

sensing the temperatures of said racks predicting an anticipated amount of heat to be

generated by the racks;

determining whether said sensed temperatures are within a predetermined temperature

range; and

varying said removal of said cooling fluid from said racks in response to said sensed

temperatures being outside said predetermined temperature range through said plurality of

returns on the basis of the anticipated amount of heat predicted to be generated by said racks.

13-24. (Canceled).

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25. (Currently amended) An apparatus for cooling a plurality of racks in a data center, said apparatus comprising:

means for activating a cooling system and opening a plurality of returns, each of said plurality of returns being configured to remove cooling fluid from various locations of said data center;

means for ~~sensing the temperatures of said racks~~ predicting an anticipated amount of heat to be generated by the racks;

~~means for determining whether said sensed temperatures are within a predetermined temperature range;~~ and

means for varying said removal of said cooling fluid from said racks ~~in response to said sensed temperatures being outside said predetermined temperature range~~ through said plurality of returns on the basis of the anticipated amount of heat predicted to be generated by said racks.

26-37. (Canceled).

38. (Currently amended) A computer readable medium on which is embedded computer software, said software comprising executable code for performing a method of cooling a plurality of racks in a data center, said method comprising:

activating a cooling system and opening a plurality of returns, each of said plurality of returns being configured to remove cooling fluid from various locations of said data center;

~~sensing the temperatures of said racks~~ predicting an anticipated amount of heat to be generated by the racks;

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~~determining whether said sensed temperatures are within a predetermined temperature range;~~ and

varying said removal of said cooling fluid from said racks ~~in response to said sensed temperatures being outside said predetermined temperature range~~ through said plurality of returns on the basis of the anticipated amount of heat predicted to be generated by said racks.

39-50. (Canceled).

51. (New) The system according to claim 4, wherein said plurality of sensors are configured to sense an environmental condition in locations outside of the plurality of racks and wherein the at least one controller is configured to substantially independently control said plurality of returns in response to said measured environmental condition out side of the racks.

52. (New) The system according to claim 1, wherein the plurality of returns includes fans configured to draw cooling fluid from the data center.

53. (New) The system according to claim 52, wherein the fans are movable, wherein a direction of cooling fluid removal is variable through movement of the fans.

54. (New) The system according to claim 1, wherein the plurality of returns are independent of the racks.

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55. (New) The method according to claim 12, wherein the step of varying said removal of said cooling fluid from said racks comprises varying the direction of removal of said cooling fluid.

56. (New) The method according to claim 12, wherein the step of varying said removal of said cooling fluid from said racks comprises substantially independently controlling said plurality of returns to thereby substantially independently vary said removal of said cooling fluid from said racks through said plurality of returns.

57. (New) The method according to claim 12, further comprising:

determining whether the anticipated amount of heat of the racks are within a predetermined temperature range; and

wherein the step of varying said removal of said cooling fluid from said racks comprises varying said removal of said cooling fluid from said racks in response to said anticipated amount of heat of the racks falling outside of the predetermined temperature range.

58. (New) The method according to claim 57, wherein the step of varying said removal of said cooling fluid from said racks further comprises increasing cooling fluid removal from those racks having anticipated amounts of heat that exceed the predetermined temperature range.

59. (New) The method according to claim 57, wherein the step of varying said removal of said cooling fluid from said racks further comprises decreasing cooling fluid

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removal from those racks having anticipated amounts of heat that fall below the

predetermined temperature range.

60. (New) The apparatus according to claim 25, wherein the various locations of said

data center comprises a plurality of racks.

61. (New) The apparatus according to claim 25, wherein the means for varying said

removal of said cooling fluid from said racks comprises means for varying the direction of

said removal of said cooling fluid.

62. (New) The apparatus according to claim 25, wherein the means for varying said

removal of said cooling fluid from said racks comprises means for substantially

independently controlling said plurality of returns to thereby substantially independently vary

said removal of said cooling fluid from said racks through said plurality of returns.

63. (New) The apparatus according to claim 25, further comprising:

means for determining whether the anticipated amount of heat of the racks are within

a predetermined temperature range; and

means for varying said removal of said cooling fluid from said racks in response to

said anticipated amount of heat of the racks falling outside of the predetermined temperature

range.

64. (New) The apparatus according to claim 63, wherein the means for varying

comprises means for increasing cooling fluid removal from those racks having anticipated

amounts of heat that exceed the predetermined temperature range.

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65. (New) The apparatus according to claim 63, wherein the means for varying comprises means for decreasing cooling fluid removal from those racks having anticipated amounts of heat that fall below the predetermined temperature range.

66. (New) The computer readable medium according to claim 38, wherein the various locations of said data center comprises a plurality of racks.

67. (New) The computer readable medium according to claim 38, further comprising:

varying the direction of removal of said cooling fluid.

68. (New) The computer readable medium according to claim 38, further comprising:

substantially independently controlling said plurality of returns to thereby substantially independently vary said removal of said cooling fluid from said racks through said plurality of returns.

69. (New) The computer readable medium according to claim 38, further comprising:

determining whether the anticipated amount of heat of the racks are within a predetermined temperature range; and

varying said removal of said cooling fluid from said racks in response to said anticipated amount of heat of the racks falling outside of the predetermined temperature range.

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70. (New) The computer readable medium according to claim 69, further comprising:

increasing cooling fluid removal from those racks having anticipated amounts of heat that exceed the predetermined temperature range.

71. (New) The computer readable medium according to claim 69, further comprising:

decreasing cooling fluid removal from those racks having anticipated amounts of heat that fall below the predetermined temperature range.